#### **OAR Box 1214**

Prepped by Ollie Stewart

**Document Number:** 

83) IV-D-49

Docket Number:

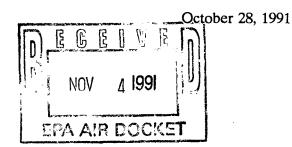
A-91-46



Environmental and Safety Engineering Staff Ford Motor Company The American Road Dearborn, Michigan 48121

Air Docket (LE-131) U.S. Environmental Protection Agency Room M-1500 401 M Street, S.W. Washington, DC 20460

Attention: Public Docket No. A-91-46



The information provided with this communication reflects Ford Motor Company's (Ford) comments on the September 3, 1991 Federal Register Notice regarding the July 12, 1991 Ethyl Corporation (Ethyl) submittal of an application for a waiver of the prohibition of certain fuels and fuel additives set forth in Section 211(f) of the Clean Air Act. The application seeks a waiver for the gasoline additive MMT, commercially labeled by Ethyl as HiTEC 3000, to be blended at a level of 1/32 grams per gallon manganese (Mn).

In addition to the information provided herein, Ford has also supplied information and tests data to the Docket on October 3, 1991. In that communication we indicated that additional testing on Explorer vehicles and the other two Escort vehicles would be supplied to EPA when available. The purpose of this communication is to supply the additional test data and to comment on some of the issues raised by Ethyl during their meeting with EPA on October 15, 1991.

The additional testing clearly indicates that MMT impairs to a significant degree the performance of emission control devices. More specifically, the performance of the EGO sensors and catalytic converters have been impaired to varying degrees. Attached are the component testing plots from the test vehicles. It was speculated by Ethyl during the October 15, 1991 meeting that Explorer vehicle #306 maintenance issue (cracked spark plug insulator) may have caused the high HC. This is not the case, as the catalyst once removed from vehicle #306 and tested on Explorer vehicle #305 did not demonstrate an increase in HC and CO levels. As such, the replaced spark plug did not cause catalyst damage.

The very high HC levels on the Explorer vehicles #304 and #306 which accumulated mileage with MMT is due, in part, to higher deterioration in HC feedgas levels. Vehicle #304 deteriorated from 2.4 gm/mi to 3.7 gm/mi, and vehicle #306 from 2.4 gm/mi to 3.4 gm/mi. The non-MMT Explorers did not demonstrate this deterioration. Non-MMT vehicle #305 HC feedgas started at 2.2 gm/mi and ended at 1.9 gm/mi. The other non-MMT vehicle #307 started at 2.2 gm/mi and ended at 2.3 gm/mi. Ford concludes that MMT caused this high deterioration in both feedgas and tailpipe HC levels.

We are also providing a description of components installed on the Explorers which caused Ford to call these vehicles prototypes. In addition, we have included the maintenance logs from these vehicles.

The data supplied herein and in our October 3, 1991 communication, indicate the significant impact MMT has on the impairment of emission control device performance and the failure of one of the two Explorer vehicles. Under Section 211(c)(1) of the Clean Air Act, EPA has the authority to issue regulations which prohibit a fuel or fuel additive from entering into the stream of commerce, if it impairs to a significant degree the performance of any emission control or device. Pursuant to this authority, EPA can deny Ethyl's waiver request based on a finding that MMT will impair to a significant degree the performance of any emission control or device. Ford submits that the degree of impairment clearly established by the data submitted for the record in conjunction with the new emissions standards under the Clean Air Act Amendments of 1990 and extended useful life requirements conclusively demonstrate that MMT will ultimately cause vehicles to fail to comply with the standards. This result provides, pursuant to Section 211(f)(4), an independent and complimentary basis upon which EPA should deny Ethyl's request for an MMT waiver.

Sincerely,

David L. Kulp

Manager, Fuel Economy Planning & Compliance

**Enclosures** 

#### ENCLOSURES TO FORD MOTOR COMPANY'S OCTOBER 28, 1991 COMMENTS ON ETHYL CORPORATION'S WAIVER REQUEST TO ADD MMT TO GASOLINE

- Ford Emission Component Test Data from Escort and Explorer Vehicles
- Description of Explorers Pre-Production Engines and Air Pumps
- Ford Comments on Issues Raised by Ethyl in its October 15, 1991 Meeting with EPA
- Ford Analysis of Ethyl's Test Corvette's HC Emission Increases
- Maintenance Records from Escort and Explorer Test Vehicles (In Addition to Items Previously Supplied to EPA in Ford's September 23, 1991 Communication)

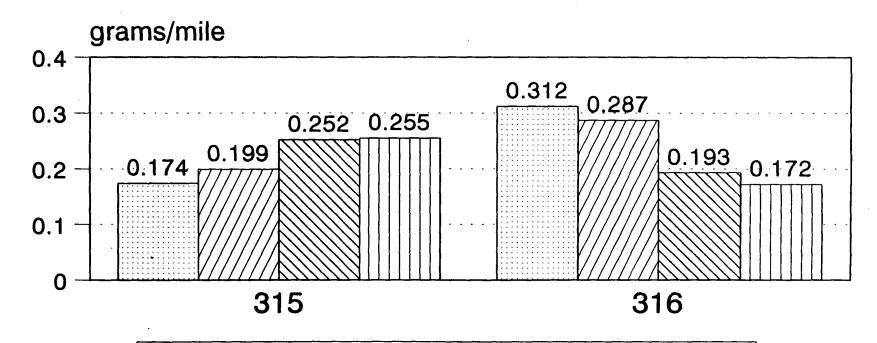
#### EMISSION COMPONENT TEST DATA ANALYSIS

The attached graphs of tailpipe HC emissions from seven test vehicles all show similar trends. Mainly, when a non-MMT fueled test vehicle tests with MMT fueled EGO sensor and/or catalyst, the HC level increases indicating impairment by MMT. Conversely, when an MMT-fueled test vehicle tests with non-MMT fueled EGO sensor and/or catalyst, the HC level decreases indicating the emission performance of the MMT-fueled vehicles has been impaired by MMT.

The very high HC level of 0.656 gm/mi on vehicle #306 after 100,000 miles was not the result of a maintenance issue, as speculated by Ethyl during the October 15, 1991 meeting with EPA. Presumably, Ethyl was referring to the cracked spark plug insulator as the maintenance issue. This cracked spark plug did not cause damage to the catalyst. The component testing of vehicle #306 catalyst on vehicle #305 did not demonstrate an increase in HC or CO levels, thus indicating no catalyst problem or maintenance issue.

The two Explorer vehicle with MMT averaged an almost 50% increase in HC feedgas levels, whereas the Explorer vehicles without MMT showed no increase. We speculate that the fuel injectors on the MMT-fueled Explorers have been contaminated by the MMT causing poor fuel distribution resulting in higher feedgas HC levels. These Explorers consumed approximately twice as much MMT as the Escorts. As such, the Escorts did not demonstrate as great an increase in HC feedgas levels.

## HC Tailpipe Emissions Escort Fleet

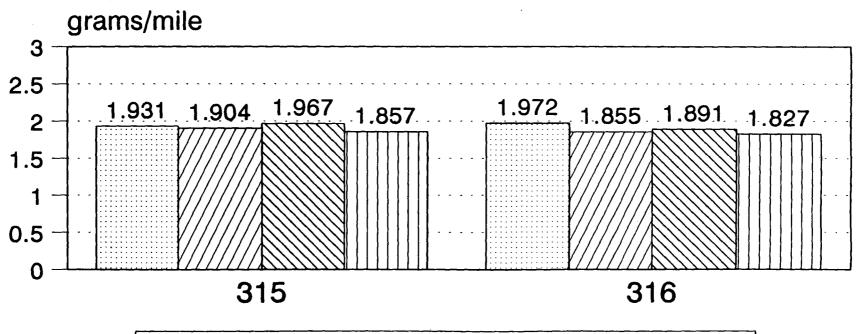


Vehicle Modification

☐ Baseline ☐ HEGO ☐ Catalyst ☐ HEGO & Catalyst

315- Non MMT Fuel

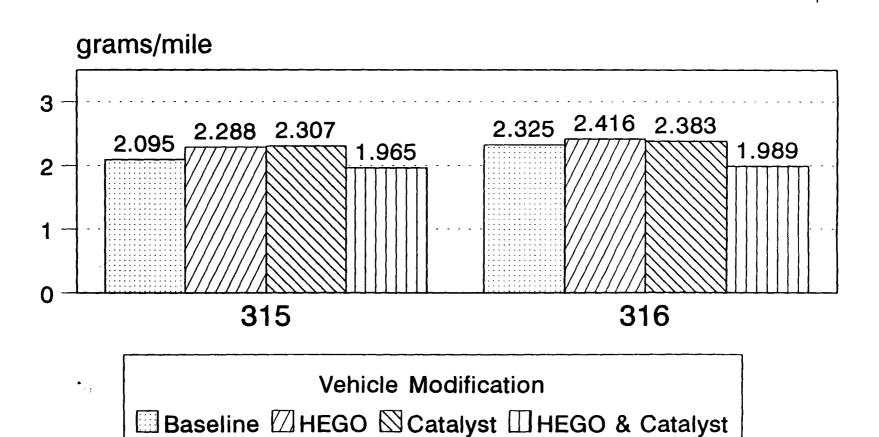
### HC Feedgas Emissions Escort Fleet



Vehicle Modification

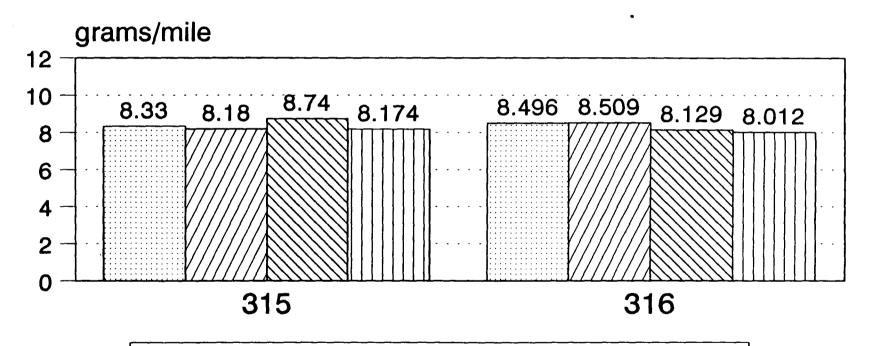
☐ Baseline ☐ HEGO ☐ Catalyst ☐ HEGO & Catalyst

### CO Tailpipe Emissions **Escort Fleet**



315- Non MMT Fuel

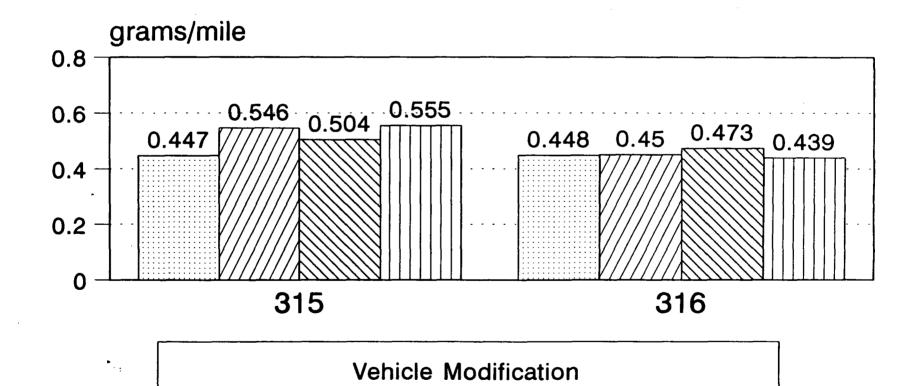
#### CO Feedgas Emissions Escort Fleet



Vehicle Modification

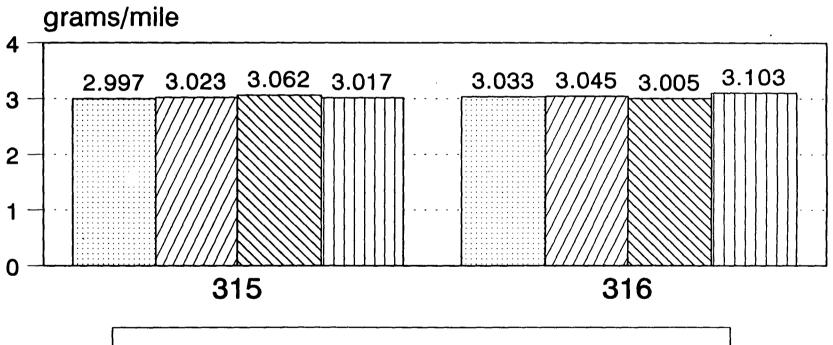
☐ Baseline ☐ HEGO ☐ Catalyst ☐ HEGO & Catalyst

#### NOx Tailpipe Emissions Escort Fleet



■ Baseline HEGO Catalyst HEGO & Catalyst

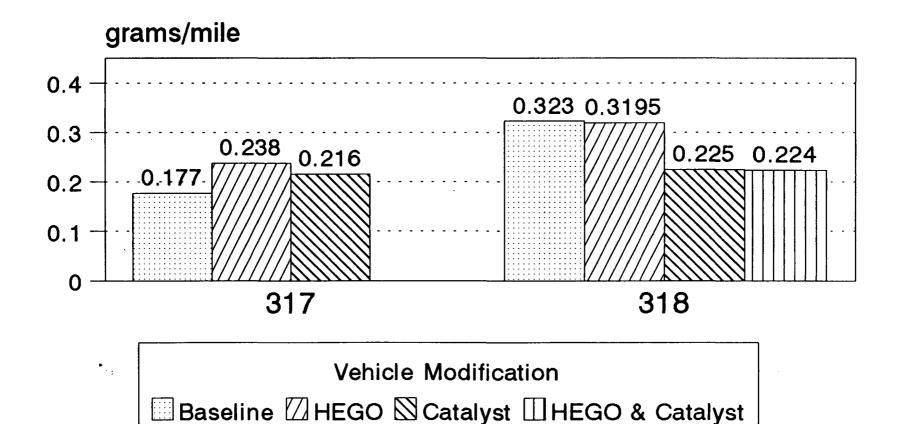
#### NOx Feedgas Emissions Escort Fleet



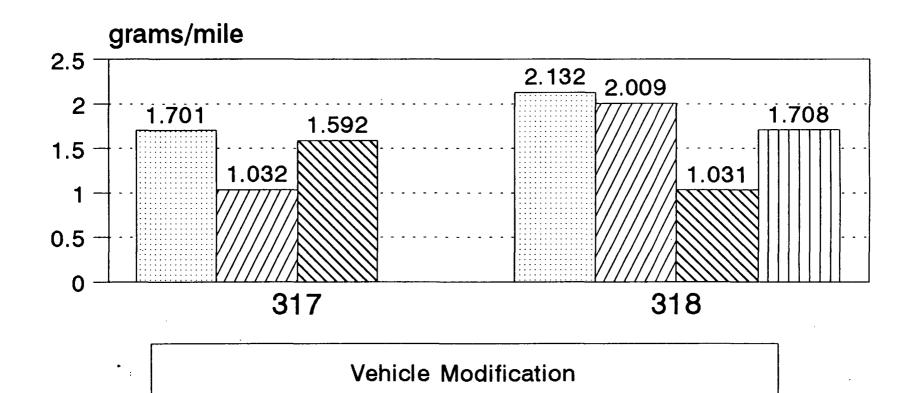
Vehicle Modification

☐ Baseline ☐ HEGO ☐ Catalyst ☐ HEGO & Catalyst

## HC Tailpipe Emissions Escort Fleet

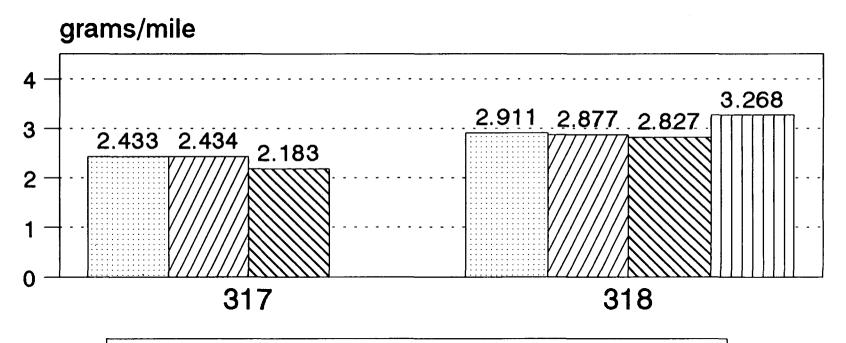


#### HC Feedgas Emissions Escort Fleet

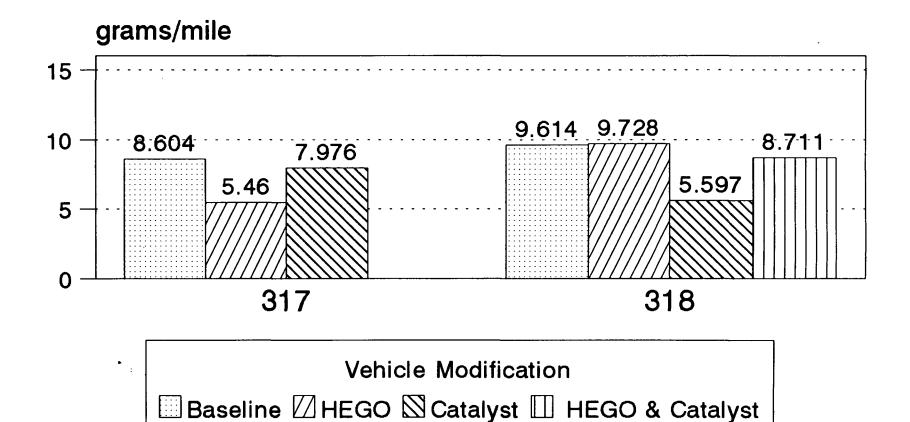


■ Baseline HEGO Catalyst HEGO & Catalyst

#### CO Tailpipe Emissions Escort Fleet

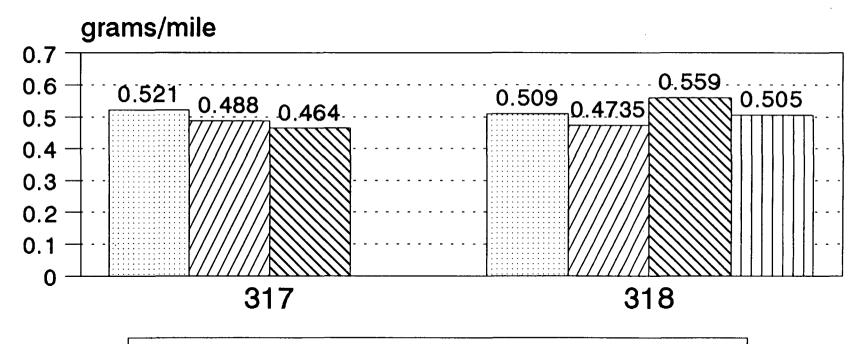


### CO Feedgas Emissions Escort Fleet



317- Non-MMT Fuel

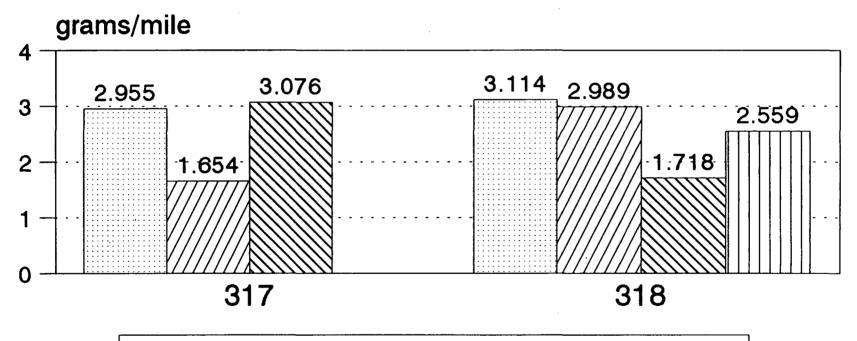
#### NOx Tailpipe Emissions Escort Fleet



Vehicle Modification

☐ Baseline ☐ HEGO ☐ Catalyst ☐ HEGO & Catalyst

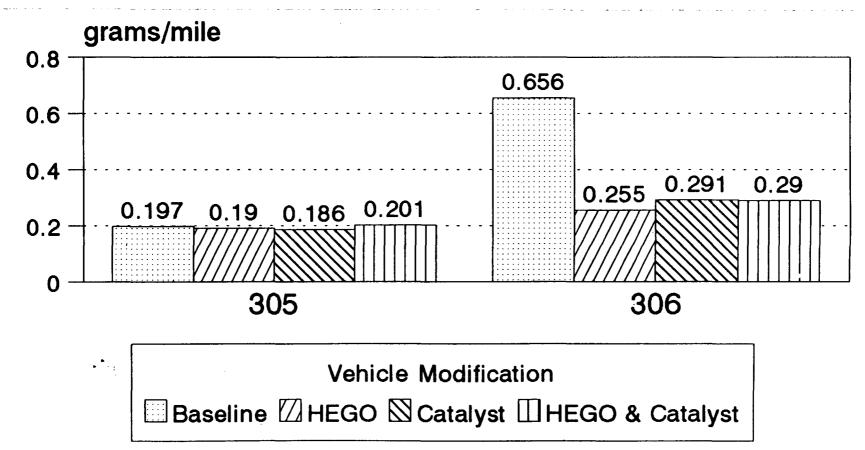
### NOx Feedgas Emissions Escort Fleet



Vehicle Modification

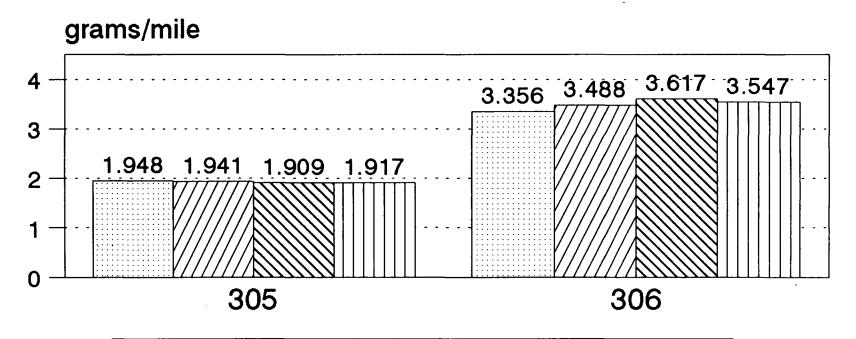
☐ Baseline ☐ HEGO ☐ Catalyst ☐ HEGO & Catalyst

# HC Tailpipe Emissions Explorer Fleet



305- Non MMT Fuel

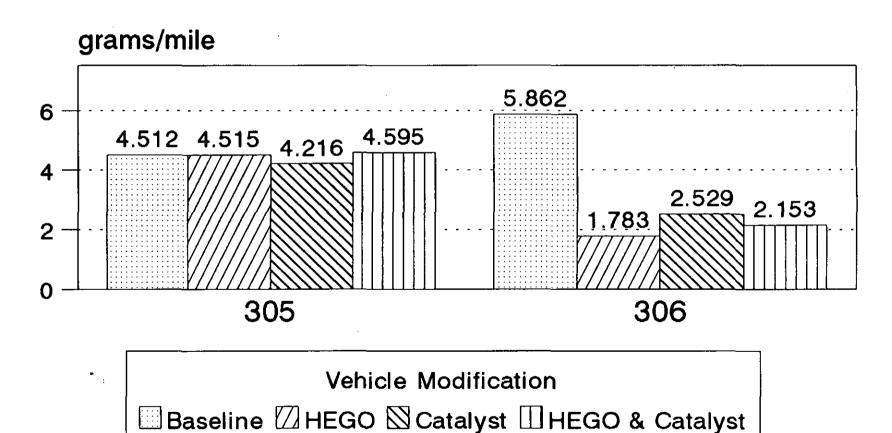
## HC Feedgas Emissions Explorer Fleet



Vehicle Modification

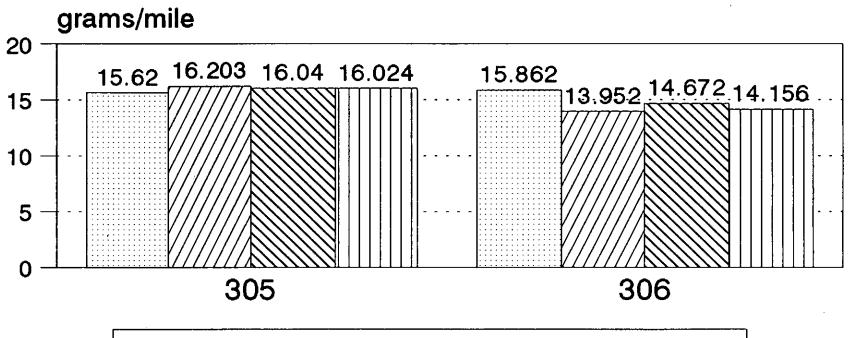
☐ Baseline ☐ HEGO ☐ Catalyst ☐ HEGO & Catalyst

# CO Tailpipe Emissions Explorer Fleet



305- Non MMT Fuel

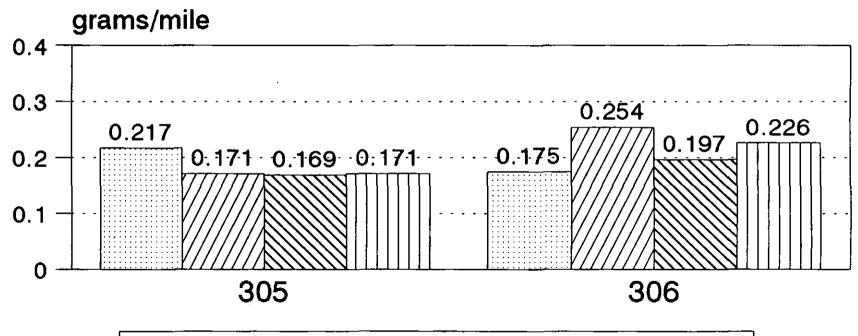
## CO Feedgas Emissions Explorer Fleet



Vehicle Modification

☐ Baseline ☐ HEGO ☐ Catalyst ☐ HEGO & Catalyst

## NOx Tailpipe Emissions Explorer Fleet

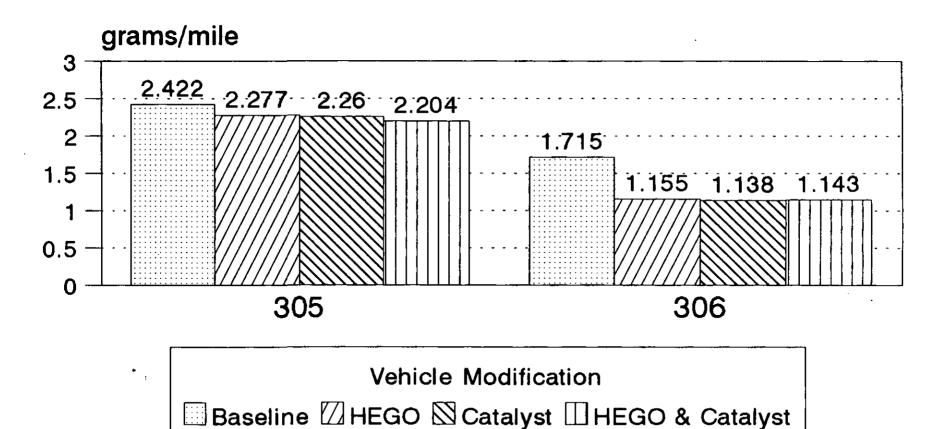


Vehicle Modification

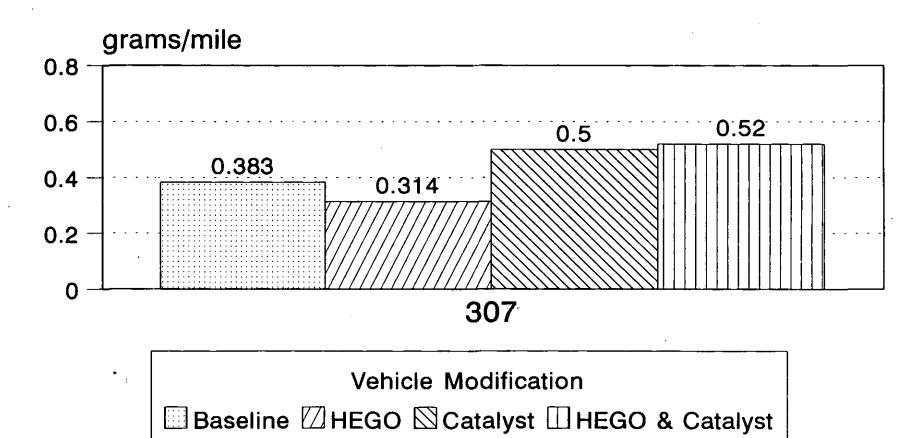
☐ Baseline ☐ HEGO ☐ Catalyst ☐ HEGO & Catalyst

305- Non MMT Fuel

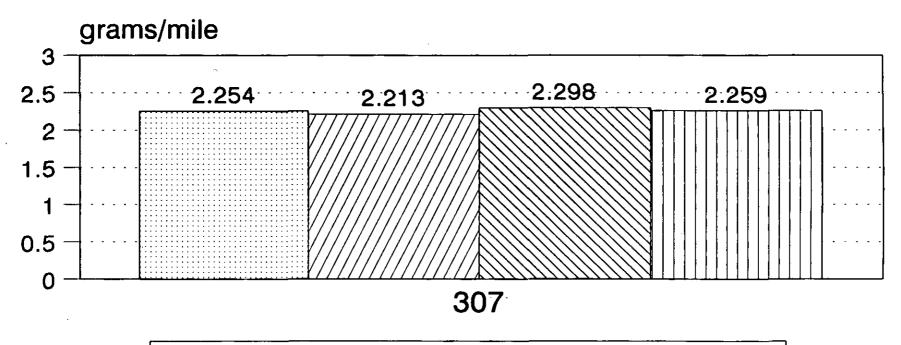
## NOx Feedgas Emissions Explorer Fleet



# HC Tailpipe Emissions Explorer Fleet



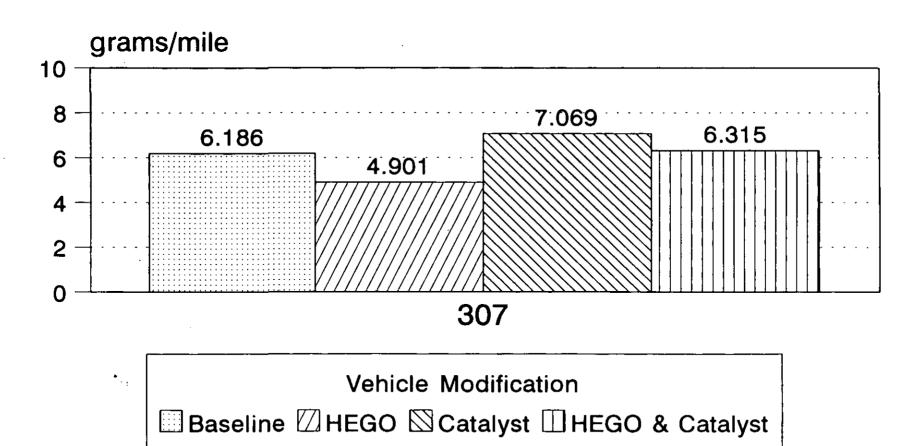
# HC Feedgas Emissions Explorer Fleet



Vehicle Modification

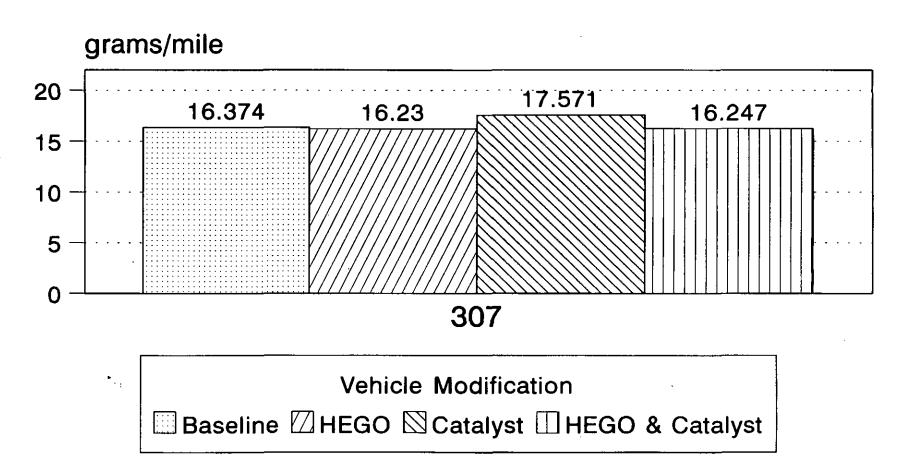
☐ Baseline ☐ HEGO ☐ Catalyst ☐ HEGO & Catalyst

# CO Tailpipe Emissions Explorer Fleet



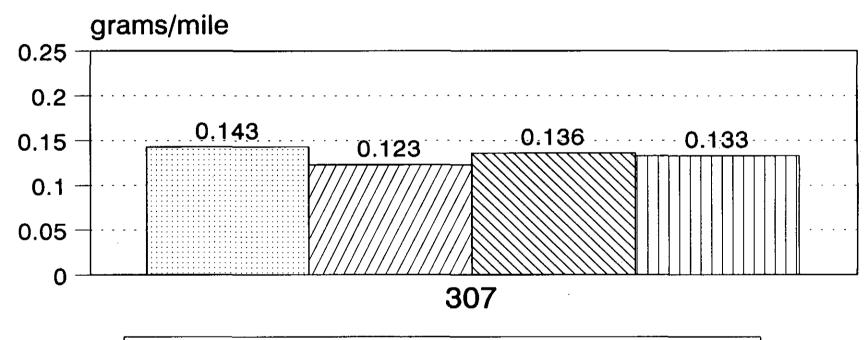
307- Non MMT Fuel

# CO Feedgas Emissions Explorer Fleet



307- Non MMT Fuel

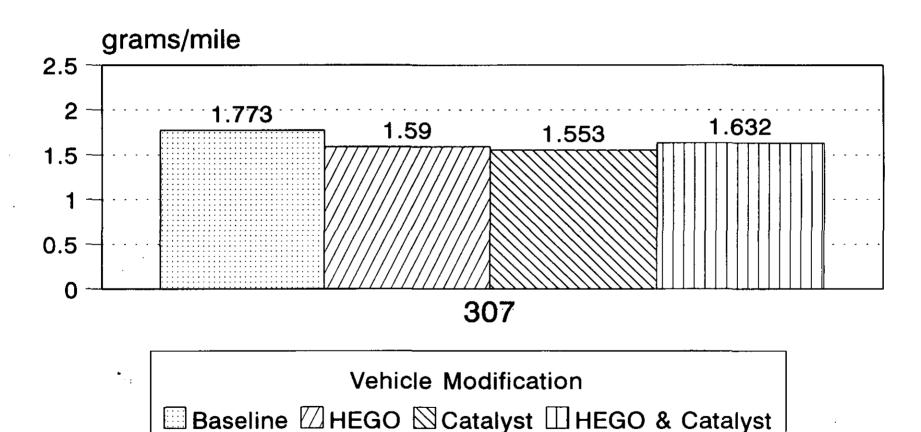
## NOx Tailpipe Emissions Explorer Fleet



Vehicle Modification

■ Baseline HEGO Catalyst HEGO & Catalyst

## NOx Feedgas Emissions Explorer Fleet



307- Non MMT Fuel

#### EXPLORER VEHICLE DESCRIPTION AND EXPLANATION OF MAINTENANCE ISSUES

The Explorer vehicles, numbers 304, 305, 306 and 307, are production vehicles with the exception of the engines and air pumps. The engines are pre-production 1993 units which were being run for purposes of evaluating engine component wear. The new design air pump system was being evaluated to meet revised California malfunction indicator light, or check engine light or SES light requirements (these various terms were used on the maintenance logs). The numerous references to check engine light or SES on the maintenance logs are believed to be an electronic engine control software issue and not a component malfunction. This type of software issue has no effect on the emission performance of the vehicle. Engineering evaluations of the vehicles after check engine light illumination did not indicate emission system malfunction.

The emission control systems, with the exception of some attaching components, on these vehicles are 1991 production systems. Some of the unscheduled maintenance performed on these vehicles and the EGR systems, such as the EGR line becoming loose, is not atypical for vehicles which have had new engines installed or new test components.

Spark plus, which differed in being single versus double platinum, were installed on the test vehicles. All plugs were the same type and heat range.

#### FORD MOTOR COMPANY'S COMMENTS ON ISSUES RAISED BY ETHYL CORPORATION IN ITS OCTOBER 15, 1991 MEETING WITH EPA

- Ethyl states, "Ford speculates that its Escorts advanced emission control system contributed to the substantial increase in HC emissions associated with use of the additive..."; this is a misquote and a misunderstanding of the Ford position. We were outlining what we believed to be reasons why Ford test Escorts and Ethyl test Escorts had different emission performance with clear fuel. The Ford test vehicles were better; one reason being the advanced emission control systems on Ford test vehicles versus Ethyl's. We stated in our October 3, 1991 communication, "We believe the differences between Ethyl's and Ford's test results for the Escort HC data with clear fuel (non-MMT) is a result of the emission control system on the 1991 Escort vehicles used for Ford as compared to the Ethyl 1988 Escorts." Ford does not believe only advanced emission control systems would be affected by MMT, we believe all emission control systems (past, present, future) are affected.
- Ethyl has taken the Ford statement, "...the greatest catalyst efficiency deterioration (for HC) from the Ford test vehicles occurred between 50,000 and 100,000 miles..." out of context when applying it only to the Escort. This statement was made by Ford comparing average of Explorer and Escort feedgas deterioration. Using an average value for fleet data has been used by Ethyl and Ford in the analysis of data. Taking one set of vehicles out and saying it does not apply for a particular interval adds little, considering the Escorts with MMT demonstrated an average 0.16 gm/mi delta greater HC deterioration factor with MMT than non-MMT after 100,000 miles. Considering that all of the Escorts started at from 0.09 to 0.12 gm/mi HC levels, a 0.16 gm/mi HC deterioration is substantial no matter what mileage interval it occurred within.
- Ethyl states in the October 15, 1991 memo that "... Chevrolet Corvettes showed no HC results such as Ford's." We disagree with this statement. As shown on another attachment, the increase in HC levels when extrapolated to 100,000 miles in order that it may be compared to, for example, the 100,000-mile Ford Escort shows a 0.12 gm/mi HC increase. This is close to the Ford Escort HC deterioration with MMT and commercially-available fuel additive packages for both the Corvettes and Escorts.
- Ethyl states, "Ford did not control variables among vehicles..."; we disagree. The Ford certification laboratory testing these vehicles is the same that tests our EPA certification vehicles. A manufacturer can not control all test variables which affect emissions. The differences in test results from the Explorer vehicles is not atypical of results we have seen from certification fleets which may have five to six of the same vehicles testing together. Ford has tested thousands of 50,000-mile durability vehicles for EPA and some of these have demonstrated a doubling of HC levels at 50,000 miles on like vehicles. If Ethyl believes that if two similar vehicles have different emission levels, then variables are not being controlled, and if they believe they controlled variables in their test fleet, we question the accuracy of data from their 48-vehicle car fleet.

• Ethyl states, "Ford plots...distort both trends and results...'; we disagree. The plots we supplied EPA are plotted in the same manner as that required by EPA for certification testing. In other words, a best-fit line is drawn through the data points showing starting and ending intercepts. These intercepts may be higher or lower than the data points at or near the intercepts.

#### FORD MOTOR COMPANY'S ANALYSIS OF ETHYL CORPORATION'S CORVETTE EMISSION TEST DATA WITH COMMERCIALLY AVAILABLE ADDITIVES

	EMISSIONS (GRAMS/MILE)						
	Mileage	HC_	CO	_NOx_			
Clear Test Vehicle	0K	.14	.19	.54			
(Average)	25K	.20	1.32	.57			
Delta		.06	1.13	.03			
MMT Test Vehicle	0 <b>K</b>	.12	.48	.58			
(Average)	25K	.21	.94	.88			
Delta		.09	.46	.30			
Delta Increase/ (Decrease) of MMT over Clear at 25K		.03	(.67)	.27			
Delta Increase/ (Decrease) of MMT over Clear Extrapolated to 100K		.12	(2.68)	1.08			

#### **OCCURRENCE CODES**

DESCRIPTION	CODE
Ballast	BAST
Basic Engine	BAEN
Body in White & Basic Body Structure	BWBS
Body Trim	BOTR
Brakes (Stop lite counters)	BRAK
Bumpers	BUMP
Cooling System	COSY
Corrosion	CORR
Cruise Control	CRUI
Doors (locks, latches)	DOOR
Electrical System	ELSY
Emissions Test	EMIS
Engine Control System	ENCS
Engine Coolant Add	ENCA
Engine Oil Added	ENOA
Exhaust System	EXSY
Final Drive	FIDR
Frame	FRAM
Front End Sheet Metal	FESM
Front Suspension	FRSU
Fuel System	FUSY
Heating, Ventilation and Air Conditioning	HVAC
Instrument Panel (Gages and Clusters)	INPA
Interior Body Trim	INTE
Maintenance	MAIN
Miscellaneous	MISC
Paint	PAIT
Rear Suspension	RRSU
Starter	STAR
Steering System	STSY
Transmission (clutch)	TRAN
Wheels and Tires	WHTI
Window Systems	WISY

#### SYCRON CORPORATION - SPECIFIC OCCURRENCE REPORT

Report from: 08/01/91 through 08/31/91

Customer number:		None	Veh#:	307	Engine: 4.0L V6		.0L V6	Transmission: 4 speed auto
Date S	Shift	Test miles to date	Loc.	Status	Client Occ.	Туре Осс.	Occ. Order	Comments
DTE S	HF	TMTD	LOC	STA	coc	TOC	00C	DES
8/26/91		105,448	G8	A	F	MAIN		Changed engine oil- level was 1/4 qt. low. Drained 2617g, and added 3155g, Oil sample taken. (105448)
8/27/91		101,227	. G8	R	F	ENCS		Driver reported that the SES light came on 4 times during the shift. Weather was 75 to 85 degrees and humid. Repaired split vacuum hose at plenum. (101227)
8/29/91		102,429	GB	R	F	ENCS		Driver reported that the SES light came on during the shift. Weather was 88 degrees, and sunny. Codes stored were 629, 10, and 111. Bill advised Steve Lewis. (102429)
8/30/91		109,412	GB	н	F	MISC		Ford requested that mileage accumulation be terminated.

#### SYCRON CORPORATION - SPECIFIC OCCURRENCE REPORT

Report from: 07/01/91 through 07/31/91

Customer nu	imber:	None	ven#:	305		Engine: 4	LUL VO	Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
	SHF	TMTD	100	STA			~~	050
DTE	SHE	–	FOC		COC	TOC	ooc	DES
7/6/91		101,298	GB	R	F	ENOA		Added 1qt. of engine oil, 789g. (101298).
7/8/91		102,136	GB	A	F	TRAN		Driver reported the vehicle was not shifting into overdrive. Codes stored were 522,566,629, 563. Repaired wiring at engine harness, TCC adapter. (102136)
7/8/91		102,830	GB	R	F	MAIN		Changed engine oil- level was full. Drained 4354g. and added 3188g. Oil sample taken. (102830)
7/11/91		104,940	GB	Н	F	EMIS		Vehicle taken to Ford for emission testing. Due at 105 000 miles. (104940)

Customer nu	imber;	None	Ven#:	306		Engine: 4	.UL V6	Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
DTE	SHF	TMTD	LOC	STA	COC	TOC	<del></del>	050
_	эпг	TMTD				TOC	000	DES
7/1/91		102,602	GB	R	F	MAIN		Changed engine oil- level was full. Drained 3191g. and added 3136g. Oil sample taken. (102602)
7/1/ <b>91</b>		102,602	GB	R	F	ENCS		Driver reported the SES light came on three times during shift. Weather was clear and 87 degrees. Codes were 563, 10, 111. Informed Steve Lewis. Vehicle was able to continue. (102602)
7/4/91		104,940	GB	Н	F	EMIS		Vehicle taken to Ford for emissions testing. Due at 105,000 miles. (104940)

Customer number:		None	Veh#:	307	Engine: 4.0L V6			Transmission: 4 speed auto
Oate	Shift	Test miles to date	Loc.	Status	Client Occ.	Туре Осс.	Occ. Order	Comments
DTE :	SHF	TMTD 104,940	LOC GB	STA H	COC	TOC EMIS	<u></u>	DES Vehicle taken to Ford for emission testing. Due at

Customer number:		None	Veh#:	#: 304	Engine: 4.0L V6			Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
DTE 6/4/91	SHF	TMTD 97,794	LOC GB	STA R	COC	TOC MAIN	<u>∞</u>	DES Changed engine oil and filter- level was 1/4 qt. low.
6/17/91		104,949	GB	н	F	EMIS		Drained 3501g, and added 3810g, Oil sample taken and oil filter saved. (97794)  Vehicle taken to Ford for emission testing. Due at 105,000 miles. (104949)

Customer number:		None	Veh#:	305	Engine: 4.0L V6			Transmission: 4 speed auto
		Test miles			Client	Туре	Oœ.	
Dâte	Shift	to date	Loc.	Status	Occ.	Occ.	Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	00C	DES
6/20/91		87,513	GB	R	, <b>F</b>	MAIN		Changed engine oil- level was 1/2 qt. low. Drained 2445g. and added 3144g. (87513)
6/24/91		91,120	GB	R	F	ENCS		Driver reported that the SES light came on during shift. Weather was sunny and dry. Codes stored were 565, 629, 563, 10, 111. Informed Steve Lewis. (91120)
6/27/91		93,356	G8	R	F	ENCS		Driver reported the SES light came on twice during the shift. Codes were 10, 111-565 in EEC. Informed Steve Lewis. (93356)
6/28/91		94,454	GB	R	F	ENCS		Oriver reported the SES light came during the shift. Weather was clear and 81 degrees. Codes were 565, 629, 563. Replaced canister purge solnoid. (Steve Lewis) (94454)
6/29/91		95,111	GB	R	F	MAIN	•	Changed engine oil and filter-level was 1/4 qt. low. Drained 3414g. and added 3885g. Oil sample taken and oil filter saved. (95111)

Customer number:		None	Vøh#:	306		Engine: 4	.0L V6	Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
DTE	SHF	TIATO	100				<del></del>	050
= -	SHE	TMTD	LOC	STA	coc	TOC	000	DES
6/10/91		87,220	GB	R	۰F	ENOA	1	Added 1 qt of engine oil, 792g. (87220)
6/10/91		- 87,411	GB	R	F	MAIN		Changed engine oil- level was full. Drained 3448g. and added 3195g. Oil sample taken. (87411)
6/11/91		88,060	GB	R	F	ENCS		Driver reported that the SES light came on twice during the shift. Weather was clear and 70 degrees. 1ST. code was 563, 10, 327, 336. Informed Steve Lewis. (88060)
6/21/91		95,123	GB	R	F	MAIN		Changed engine oil and filter- level was 1/4 qt. low. Drained 3420g, and added 3810g. Oil sample taken and oil filter saved. (95123)
6/30/91		101,504	GB	R	F	ENOA	1	Added 1 qt. engine oil, 792g. (101504)

Report from: 06/01/91 through 06/30/91

Customer number:

None

Veh#:

307

Engine: 4.0L V6

Transmission: 4 speed auto

Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	00C	DES
6/14/91		88,657	GB	Ŕ	,F	ENOA	1	Added 1qt of Engine Oil, 792g. (88657).
6/18/91		89,893	G8	R	F	MAIN		Changed engine oil- level was full. Drained 3153g. and added 3255g. Oil sample taken. (89893)
6/28/91		97,596	GB	R	F	MAIN		Changed engine oil and filter-level was 1/2 qt. low. Drained 3595g. and added 3505g. Oil sample taken and oil filter saved. (97596)

Customer number:		None	Ven#:	304		Engine: 4	.OL V6	(ransmission ; 4 speed auto
		Test miles			Client	Туре	Occ.	
Date St	nift	to date	Loc.	Status	Occ.	Occ.	Order	Comments
DTE S	-IF	TMTD	LOC	STA	coc	TOC	<u></u>	DES
5/2/91		82,291	GB	A	F	MAIN		Changed engine oil and filter- level was full.  Drained 3985g, and added 3989g. Oil sample taken and oil filter saved. (82291)
5/7/91		84,949	GB	н	F	EMIS		Vehicle taken to Ford for emission testing. Due at 85,000 miles. (84949)
5/20/91		88,512	GB	R	F	ENOA		Added 1qt. of Engine Oil, 792g. (88512).
5/22/91		90,005	GB	Ħ	F	MAIN		Changed engine oil- level was full. Drained 3389g, and added 3305g. Oil sample taken. (90005)
5/24/91		91,687	GB	R	F	MISC		Removed 67 grams of oil for sample and label. Per Steve Lewis (91687)

Customer number:		None	Veh#:	305		Engine: 4	.0L V6	Transmission: 4 speed auto	
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Туре Осс.	Occ. Order	Comments	
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u>~~</u>	DES	
5/10/91		79,914	GB	R	F	MAIN		Changed engine oil and filter- level was 1qt. low. Drained 3304g, and added 4119g. Oil sample and oil filter saved. (79914)	
5/16/91		83,300	GB	R	F	ENOA		Added 1qt. of Engine Oil, 789g. (83300).	
5/21/91		84,940	GB	н	F	EMIS		Vehicle taken to Ford for emission testing. Due at 85,000 miles. (84940)	

Customer number:		None	None	None	None	Veh#:	306		Engine:	4.0L V6	Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments			
<b></b>	Çi int	io caic	Loc.	CILLIO	<b></b>	<b></b>	Older	Comments			
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u></u>	DES			
5/3/91		72,388	G8	R	F	MAIN		Changed engine oil- level was 1/2 qt. low. Drained 2589g, and added 3181g. Oil sample taken. (72388)			
5/16/91		79,986	GB	R	F	MAIN		Changed engine oil and filter- level was 1/4 qt. low. Drained 3442g. and added 3594g. Oil sample taken and oil filter saved. (79986)			
5/20/91		81,263	GB	R	F	ENOA	i	Added 1qt. of Engine Oil, 805g. (81263).			
5/24/91		84,826	GB	R	F	MISC		Removed 95 grams of oil for sample and label. Per Steve Lewis. (84826)			
5/24/91		84,940	GB	R	F	MAIN		Replaced air filter. (84940)			
5/24/91		84,940	GB	Н	F	EMIS		Vehicle taken to Ford for emission testing. Due at 85,000 miles. (84940)			

Customer number:		None	None	None	None	None	ven#:	307	-	Engine: 4	1.UL V6	Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments				
DTE	SHF	TMTD	LOC	STA		TOC	<u>оос</u>	DES				
5/2/91		74,920	GB	R	F	MAIN		Changed engine oil- level was full. Drained 3303g, and added 3301g. Oil sample taken. (74920)				
5/16/91		82,626	GB	R	F	MAIN		Changed engine oil and filter- level was 1/2 qt. low. Drained 3406g, and added 3964g. Oil sample taken and oil filter saved, (82626)				
5/21/91		84,940	GB	н	F	EMIS		Vehicle taken to Ford for emission testing. Due at 85,000 miles. (84940)				

Customer number:		None	Veh#:	304	Engine: 4.0L V6			Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u></u>	DES
4/5/91		66,375	GB	A	F	MISC	. 1	Air pump counter inop. Replaced blown 20 amp
								fuse to air pump. (66375)
4/8/91		67,231	GB	R	F	MAIN	1	Changed engine oil and filter- level was 1/2 qt. low.
								Drained 3679g, and added 3500g. Oil sample
4/19/91		74,753	GB	R	F	MAIN	1	taken and oil filter saved. (67231) Changed engine oil- level was 1/2 qt. low. Drained
4/13/31		74,733	GB		'	IAN-CIIA		2738g, and added 3155g. Oil sample taken.
								(74753)
4/30/91		80,589	GB	R	F	ENOA	1	Added 1qt. of Engine Oil, 789g. (80589).

Customer number:		None	Veh#:	305	Engine: 4.0L V6			Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
DTE	SHF	ТМТО	LOC	STA	coc	TOC	$\overline{\infty}$	DES
4/15/91		64,785	GB	R	F	MAIN	1	Changed engine oil and filter- level was full.  Drained 4099g, and added 3563g. Oil sample taken and oil filter saved. (64785)
4/29/91		72,327	GB	R	F	MAIN	1	Changed engine oil- level was 1/2 qt. low. Drained 2771g. and added 3207g, Oil sample taken. (72327)

Customer number:		NOUG	ven#:	306	Engine. 4.UL V6			Transmission . 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Туре Осс.	Occ. Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u> </u>	DES
4/5/91		57,169	GB	R	F	MAIN	1	Changed engine oil- level was 1/2 qt. low. Drained 2772g. and added 3522g. Oil sample taken. (57169)
4/20/91		64,847	GB	A	F	MAIN	1	Changed engine oil and filter- level was full.  Drained 3780g. and added 3773g. Oil sample taken and oil filter saved. (64847)
4/24/91		66,114	GB	R	F	BAEN	1	Oriver reported that accelerator pedal was hard to push down. Checked out and cleaned throttle plate (66114)

Customer number:		None	ven#:	307	Engine: 4.0L V6			Transmission: 4 speed auto	
	Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Oœ.	Occ. Order	Comments
	DTE	SHF	TMTD	LOC	STA	COC	TOC	00C	DES
	4/5/91		60,330	GB	R	F	MAIN	2	Changed engine oil-level was full. Drained 3266g. and added 3234g. Oil sample taken. (60330)
	4/17/91		67,226	GB	R	F	ENOA	1	Added 1qt. of Engine Oil, 796g. (67226).
	4/17/91		67,419	GB	R	F	MAIN	2	Changed engine oil and filter- level was full.  Drained 4074g, and added 3509g. Oil sample taken and oil filter saved. (67419)
	4/24/91		70,433	GB	R	F.	ENOA	2	Added 1qt. of Engine Oil, 791g. (70433).

Customer number:		None	None	Veh#:	304		Engine: 4	.OL V6	Transmission: 4 speed auto
		Test miles			Client	Туре	Occ.		
Date	Shift	to date	Loc.	Status	Occ.	Occ.	Order	Comments	
DTE	SHF	TMTD	LOC	STA	coc	TOC	00c	DES	
3/4/91		54,941	G8	н	FM	EMIS	4	Vehicle taken to Ford for emissions test, due at 55,000 miles. (54941)	
3/26/91		59,797	GB	R	F	ENOA	1	Added 1qt. of Engine Oil.(59797).	
3/26/91		59,988	GB	R	F	MAIN	2	Changed engine oil- level was full. Drained 3311g, and added 2968g. Oil sample taken. (59988)	

Customer nu	mber:	None	Veh#:	305		Engine: 4	.OL V6	Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Туре Осс.	Occ. Order	Comments
							_	
DTE	SHF	TMTD	roc	STA	COC	TOC	00¢	DES
3/27/91		57,244	GB	R	F	MAIN	1	Changed engine oil- level was 1/4qt, low. Drained 2842q, and added 3225q. Oil sample taken.
								(57244)

Customer number:		None	Veh#:	307	Engine: 4.0L V6			Transmission: 4 speed auto
		Test miles			Client	Туре	Occ.	
Date	Shift	to date	Loc.	Status	Occ.	Occ.	Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u>000</u>	DES
3/4/91		54,939	GB	Н	FM	EMIS	3	Vehicle taken to Ford for emissions test, due at 55 000 miles (54939)

Customer number:		None	Veh#:	304		Engine: 4	.0L V6	Transmission: 4 speed auto
<b>D</b> -44	OL:4	Test miles	Las	0	Client	Туре	Occ.	•
Date	Shift	to date	Loc.	Status	Occ.	Occ.	Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u></u>	DES
2/1/91		37,440	GB	R	F	MAIN	2	Changed engine oil and filter - level was 1 qt. low. Drained 3312g, added 3845g. (37440)
2/12/91		43,303	GB	R	F	ENOA	1	Added 1qt of Engine Oil, 758g. (43303)
2/14/91		45,015	GB	R	F	MAIN	2	Changed engine oil- level was full. Drained 3115g. added 3319g. Saved oil sample. (45015)
2/23/91		50,053	GB	R	F	BAEN	1	Inspected & replaced air filter element. (50053)
2/27/91		52,441	GB	R	F	MAIN	1	Changed oil & filter- level was 1/2 qt. low. Drained 3474g, added 4089g. Oil sample taken & oil filter saved. (52441)

Customer number:		None	None	Veh#:	305		Engine: 4	.0L V6	Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments	
DTE	SHF	TMTD	LOC	STA	coc	TOC		DES	
2/3/91		46,033	G8	R	F	MISC	t	Replaced counter for air pump, not working-reading 480 cyc. (46033)	
2/5/91		47,272	GB	R	F	ENOA	1	Added 1qt of Engine Oil, 790g. (47272)	
2/8/91		49,792	G8	R	F	MAIN	1	Changed engine oil & filter, level was 1/4 qt. low. Drained 3759g, and added 3695g. Saved oil filter & oil sample. (49792)	
2/13/91		52,720	GB	R	F	ENOA	1	Added 1qt. of Engine Oil, 762g (52720)	
2/18/91		54.940	GB	н	F	EMIS	5	Vehicle taken to Ford for 55k emission test. (54940)	

Customer nu	mber:	None	Veh#:	306		Engine: 4	I.OL V6	Transmission: 4 speed auto
		Test miles			Client	Туре	Occ.	
Date	Shift	to date	Loc.	Status	Oœ.	Oœ.	Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u> </u>	DES
	9:11		LOC				000	
2/8/91		49,950	GB	R	F	MAIN	2	Changed engine oil & filter, level was 1 qt. low. Drained 3331g. added 3993g. Saved oil filter & oil sample. (49950)
2/18/91		54.939	G8	н	F	EMIS	4	Vehicle taken to Ford for 55k emission test (54939)

Customer number:		None	Veh#:	: 307	Engine: 4.0L V6			Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u>000</u> c	DES
2/13/91		45,230	GB	R	F	MAIN	1	Changed engine oil- level was full. Drained 3164g, added 3477g. Saved oil sample. (45230)
2/23/91		51,365	GB	R	F	BAEN	1	Inspected & replaced air filter element. (51365)
2/26/91		52,406	GB	R	F	MAIN	1	Changed oil & filter- level was 1/2 qt. low. Drained 3370g, added 3942g. Oil sample taken, & oil filter saved. (52406)

Customer number:		None	ven#:	304	Engine: 3.85 V6			Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
1/4/91	1st	27,652	GB		F	MISC	2	Removed Air Pump Counter - Inop., Installed Air Pump Counter Supplied By Ford, Advised Curt Tyson, (27652)
1/9/91	1st	28,502	GB		F	ENOA	1	Added 808g of Engine Oil (28502)
1/11/91	1st	30,130	GB		F	MAIN	4	Changed Engine Oil-Level Was Full. Drained 3299g, Added 3194g.(30130)
1/19/91	1st	33,499	G8		F	MISC	1	Air Pump Counter Stuck At 87-Replaced Counter & Relocated In Glove Box. Replaced EGR Supply Tube Part #1A2 , Index #304(33499)

Customer number:		None	Veh#:	305	Engine: 3.8L V6			Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
			_				_	
1/7/91	1st	31,405	GB		, F	INPA	1	Speedometer Needle Sticks At 67 to 69 M.P.H.,& Tack Reads Different At Times, No Problem Found. (31405)
1/7/91	1st	32,024	GB		F	ENOA	2	Added 798g of Engine Oil (32024)
1/11/ <b>91</b>	2nd	35,167	GB		F	MAIN	1	Changed Engine Oil And Filter-Level Was 1/4Qt. Low. Drained3750g, Added3914g.(35167)
1/19/91	1st	37,780	GB		F	MISC	1	Relocated Air Pump Counter To Glove Box, Replaced EGR Supply Tube Part#1A2, Index #305(37780)
1/28/91	1st	41,634	GB		F	MISC	1	Air Pump Counter Bad - Reading *870*, Advised Curt Tyson. (41634)
1/29/91	1st	42,482	GB	•	F	MAIN	1	Changed Engine Oil-Level Was Full. Drained 3455g, Added 3149g. (42482)

Customer number:		None	Veh#:	306	Engine: 3.8L V6			Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
1/16/91	2nd	35,184	GB		F	MAIN	1	Changed Engine Oil And Filter-Level Was Full. Drained 3969g, Added 3841g. (35184)
1/19/91	1st	37,586	GB		F	MISC	1	Replaced EGR Supply Tube Part#1A2 Index#307,Replaced Air Pump Counter#5 Reading Of 480 New Counter Reading Of 000,Relocate In
1/29/91	1st	42,485	GB		F	MAIN	1	Glove Box(37586) Changed Engine Oil-Level Was Full. Drained 3370g, Added 3162g.(42485)

Customer number:		None	Veh#:	307	Engine: 3.8L V6			Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
1/10/91	1st	29,785	GB		F	ENOA	1	Added 787g of Engine Oil(29957)
1/10/91	1st	29,957	GB		F	MAIN	2	Changed Engine Oil-Level Was Full. Drained 3084g, Added 3241g.(29957)
1/19/91	1st	33,623	GB		F	MISC	1	Relocated Air Pump Counter To Glove Box "Reading 2014",Replaced EGR Supply Pipe Index#2014(33623)
1/29/91	2nd	37,643	GB		F	MAIN	1	Changed Engine Oil And Filter-Level Was Full.  Drained 3880g, Added 3885g, (37643)

Customer number:		None	Veh#:	304		Engine: 3	.8L V6	Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
12/2/90	100 M	15,252	GB	R	F	ENOA	1	Added 1 qt. of engine oil, 804g. (15,252)
12/3/90		15,651	G <b>B</b>	н	F	MAIN	1	Changed engine oil, level was 3/4 qt. low. Drained 2650g, installed 3228g of oil.(15,651)
12/6/90		17,728	GB	R	F	ENCS	2	Check engine light came on. Advised Steve Lewis (17,728)
12/6/90		17,794	GB	R	F	ENCS	3	Check engine light came on. Advised Steve Lewis (17,794)
12/6/90		17,821	G8	R	F	ENCS	4	Check engine light came on. Advised Steve Lewis (17,821)
12/6/90		17,918	GB	R	F	ENCS	5	Check engine light came on. Advised Steve Lewis (17,918)
12/7/90		18,976	GB	R	F	ENCS	1	Check engine light came on. Advised Steve Lewis (18,976)
12/10/90		19,950	GB	н	F	ENCS	4	Replaced hose from PFE to EGR supply - hose split. (19,950)
12/10/90		19,950	GB	R	F	EMIS	5	Vehicle taken to Ford for emissions. (19,950)
12/27/90		22,184	GB	R	F	MAIN	1	Changed engine oil (5W30) and filter. Level was full. Drained3897g, installed,3993g of oil (22,184)

Customer n	Customer number:		Veh#:	305		Engine: 3.8L V6		Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
12/11/90		20,425	GB	R	F	MAIN	1	Change engine oil (10W30) and filter. Oil level was at 1/2 qt. low. Drained 3479g, installed 4008g of oil
12/21/90		26,249	GB	R	F	ENOA	1	(20,425) Added 1 qt, of engine oif, 798g. (26,249)
12/26/90		27,621	GB	R	F	MAIN	1	Changed engine oil (5W30) and filter. Level was full. Drained 3918a, installed 4008a of oil (27 521)

Customer number:		None	Veh#;	306	Engine: 3.8L V6			Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
12/13/90		20,565	GB	Н	F	MAIN	1	Changed engine oil (5W30) and filter - level was
12/29/90		27,585	G8	н	F	MAIN	1	full. Drained 3864g, installed 4012g of oil(20,565) Changed engine oil (5W30) and filter level was 1/2 qt low. Drained 2580g, installed 3220g of oil (27585)

Customer number:		None	Veh#:	#: 307	Engine: 3.8L V6			Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
12/1/90		14,948	GB	R	F	ENOA	1	Added 1 qt. of engine oil, 795q. (14,948)
12/3/90		15,811	GB	Н	F	MAIN	2	Change engine oil, level was 1/2 qt. low. Drained 2863q, installed 3216q of oil. (15,811)
12/10/90		19,950	GB	R	F	ENCS	2	Replaced hose from PFE to EGR supply tube - hose split. (19,950)
12/10/90		19,950	GB	R	F	EMIS	3	Vehicle taken to Ford for emissions, (19,950)
12/27/90		22,218	GB	R	F	MAIN	1	Changed engine oil (5W30) and filter. Level was 1 qL low. Drained 3000g, installed 4008g of oil (22,218)

Customer number:		None	Veh#:	304		Engine: 3	.8L V6	Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Туре Осс.	Occ. Order	Comments
11/19/90		5,402	GB	Н	F	ENCS	2	EDIS module installed (part #90GB-12K072-BA, Index #A4428). (5,402)
11/19/90		5,402	GB	н	F	ENCS	4	Vac. leak repaired. Leak at intake plenum - hose to EVR and thermactor solonoid - split. (5,402)
11/20/90		6,637	GB	R	F	ENOA	1	Added 1 gt, engine oil. 798 grams (6,637)
11/21/90		7,416	GB	A	۶	MAIN	2	Changed engine oil and filter. Oil level was full. Removed 4,005 G. oil and installed 4,000 G. new oil. (7,416)
11/21/90		7,942	GB	R	F	ENCS	3	Driver noticed check engine light appear for a few seconds. Weather; rainy. Advised Steve Lewis. (7,942)
11/26/90		10,068	GB	R	F	ENCS	2	Replaced hose from PFE to EGR supply pipe. (10,068)
11/29/90		13,399	GB	R	F	ENCS	2	Driver noticed Check Engine light appear for a few seconds. (13,399)

Customer number:		None	Veh#:	305	Engine: 3.8L V6			Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
11/2/90	·	10,869	GB	R	F	ENOA	<u> </u>	Added 1 qt. engine oil. 793 grams (10,869)
11/5/90		12,748	GB	R	F	MAIN	1	Change oil and filter (FL-1A). Oil level was 1 qt. low. Drained 3280 g installed 4000 g of oil. Saved oil filter. (12,748)
11/6/90		13,554	GB	R	F	ENCS	1	Oriver noticed unusual sound when accelerating. Repaired nose at PFE Valve. (13,554)
11/7/90		15,598	GB	Н	F	ENCS	1	Repaired air pump wire - not coming on. Wire backed out of connector at EEC. (15,598)
11/15/90		19,950	GB	R	F	EMIS	4	Took vehicle to Ron Hurley for emission, (19,950)

Customer number:		None	Veh#:	306		Engine: 3	.8L V6	Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
11/4/90		11,191	GB	R	F	ENOA	1	Added 1 qt. engine oil. 806 grams (11,191)
11/5/90		12,470	GB	R	F	MAIN	1	Change oil and filter (FL-1A). Oil level was full.  Drained 3956 g installed 4000 g of oil. Saved oil filter. (12,470)
11/7/90		14,323	GB	R	F	ENCS	1	Oriver noticed an exhaust leak by the motor.  Repaired hose from EGR supply pipe. (15,234)
11/8/90		15,526	GB	R	F	ENCS	3	Check engine light came on three times for two - five seconds. Advised Steve Lewis. (15,526)
11/12/90		17,676	GB	н	F	ENCS	1	Replaced counter for air pump, not working - reading 361 cyc. Mileage - 17,676.
11/15/90		19,950	GB	н	F	EMIS	5	Took vehicle to Ron Hurley for emission. (19,950)

Customer nui	Customer number:		Veh#:	307	Engine: 3.8L V6			Transmission: 4 speed auto
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
11/19/90		5,348	GB	Н	F	ENCS	1	Replaced EDIS module (part #90GB-12K072-BA, Index #A4427-Production). (5,348)
11/21/90		7,467	GB	Я	F	ENCS	1	Driver noticed check engine light appear for a few seconds. Weather: rainy. Advised Steve Lewis. (7,467)
11/21/90		7,467	GB	R	F	MAIN	`2	Changed engine oil and filter. Oil level was 1 qt. low. Removed 3,281G oil and installed 4,207 G. new oil. (7,467)
11/21/90		8,533	GB	R	F	ENCS	4	Driver noticed check engine light appear for a few seconds. Weather: Rainy. Advised Steve Lewis. (8.533)

Customer number:		None	Veh#:	304		Engine: 4	.0L V6	
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
10/11/90		0	GB	н	F	BAEN	1	Complete instalataion of 93 SEFI engine and emissions.
10/14/90		395	GB	R	F	ENOA	1	Added 1 qt. engine oil. (395)
10/16/90		832	GB	R	F	ENOA	1	Added 1 qt. engine oil. (832)
10/17/90		1,983	GB	R	F	EMIS		Driver noticed when vehicle was shut off the air pump came on for approx. 5 seconds. (1,983)
10/18/90		2,518	GB	R	F	<b>EMIS</b>	2	Discounted air pump per Curt Tyson. (2,518)
10/21/90		4,219	GB	Я	F	ENOA	1	Added 1 qt. engine oil. (4,219)
10/22/90		4,950	GB	н	F	EMIS	2	Vehicle taken to Ford for emission testing. (4,950)

Customer nun	Customer number:		Veh#:	305	Engine: 4.0L V6			
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Туре Осс.	Occ. Order	Comments
10/2/90		0	GB	Н	F	BAEN	2	Complete installataion of 93 SEFI engine and emissions.
10/5/90		1,699	GB	R	F	ENOA	1	Added 1 qt. engine oil. (1,699)
10/8/90		2,800	GB	R	F	TRAN	3	Driver reported vehicle not shifting after 40 mph.  Overdrive not working - advised Steve Lewis.  Repaired wiring for transmission.(2,800)
10/9/90		3,275	GB	R	F	ENOA	1	Added 1 qt. engine oil. (3,275)
10/10/90	•	4,091	GB	R	F	ENOA	1	Added 1 qt. engine oil. (4,091)
10/11/90		4,949	GB	н	F	EMIS	2	Vehicle taken to Ford for emission testing. (4,949)
10/25/90		5,245	G8	H	F	MAIN	1	Changed oil & filter. (5,245)
10/25/90		5,245	GB	н	F	ENCS	2	Installed ED156 - A9644 Prototype. (5,245)

Customer nu	Customer number:		Veh#:	306	Engine: 4.0L			
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
10/3/90		0	GB	Н	F	BAEN	1	Complete instalataion of 93 SEFI engine and emissions.
10/6/90		1,149	GB	R	F	ENOA -	1	Added 1 qt. engine oil. (1,149)
10/9/90		3,407	GB	R	F	ENOA	1	Added 1 qt. engine oil. (3,407)
10/11/90		4,966	GB	н	F	EMIS	2	Vehicle taken to Ford for emission testing. (4,966)
10/26/90		5,269	GB	R	F	MAIN	1	Changed oil & filter - sample saved. (5,269)
10/26/90		5,269	GB	R	F	ENCS	2	Installed new EDIS-6 (prototype) part #906B-12KO72-BA index #A9645 (5,269)
10/26/90		5,269	GB	R	F	ENCS	3	Installed new-EEC chip. (5,269)
10/30/90		6,539	G₿	R	F	BAEN	1	Removed AWFS42PP spark plugs. (6,539)
10/20/00		6 530	GB		E	DAEN	2	Installed OEM AMERASC court aluga (6.630)

Customer number:		None	Veh#:	307		Engine: 4	.0L V6	
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
10/14/90		0	GB	н	F	BAEN	2	Complete instalataion of 93 SEFI engine and emissions.
10/18/90		1,150 4,962	GB GB	H	F	EMIS EMIS	. ,	Discounted air pump per Curt Tyson. (1,150) Took vehicle to Ford for Emission. (4,962)

Customer number:		None	Veh#:	318	Engine: 1.9L SEFI					
<b>-</b>	O. 16	Test miles	•	O	Client	Туре	Occ.			
Date	Shift	to date	Loc.	Status	Occ.	Occ.	Order	Comments		
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u>оос</u>	DES		
8/1/91		82,335	GB	R	F	MAIN		Changed engine oil and filter- level was full.  Drained 3256g, and added 3240g. Oil sample taken and oil filter saved. (92452)		
8/1/91		82,335	GB	R	F	WHTI		Cross rotated tires. (92452)		
8/4/91		83,941	GB	R	F	ENOA		Added 1qt. of engine oil. 789g. (94058)		
8/7/91		86,980	GB	R	F	WHTI		Driver reported that the left rear tire had a slow leak. Plugged left rear tire. (97097)		
8/7 <i>/</i> 91		87,729	G8	R	F	MISC		Driver reported that the right headlight was inop. on low beam. Replaced right burnt out headlight bulb. Partif9004. (97846)		
8/9/91		90,126	GB	R	F	MISC		Changed engine oil- level was 1/4 qt. low. Drained 2674g, and added 3179g. Oil sample taken. (100243)		
8/16/91		97,37 <del>9</del>	GB	A	F	MISC		Changed engine oil and filter- level was full.  Drained 3366g, and added 3245g. Oil sample taken and oil filter saved. (107496)		
8/22/91		102,620	GB	R	F	MISC		Driver reported a rubbing sound on sharp left turns. Removed broken right inner splash shield. (112737)		
8/26/91		104,933	GB	Н	F	EMIS		Vehicle returned to Ford for final emission test. (115050)		

Customer nu	Customer number:		Veh#:	315		Engine: 1	I.9L SEF	<b>i</b>
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u></u>	DES
7/3/91		83,429	GB	R	F	MAIN		Changed engine oil- level was full. Drained 2897g. and added 3118g. Oil sample taken. (87550)
7/15/91	1	90,200	GB	R	F	WHΠ		Driver reported that the right rear tire was low.  Repaired nail hole in right rear tire. (94321)
7/16/91		91,055	GB	A	F	MAIN		Changed engine oil and filter- level was full.  Drained 3138g, and added 3271g. Oil sample taken and oil filter saved. (95176)
7/22/91	1	94,517	GB	R	F	WHTI		Driver reported that the right rear tire went flat. Installed plug in tire. Also reported the tire was very badly cupped. (98638)
7/26/91		98,282	GB	R	F	MAIN		Changed engine oil- level was 1 qt. low. Drained 2601g, and added 3200g. Oil sample taken. (102403)

Customer nu	Customer number:		lone Veh#:	316	Engine: 1.9L SEFI			il
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	$\overline{\infty}$	DES
7/1/91	1	81,445	GB	R	F	MISC		Driver reported that the right headlight was inop. Replaced right headlight bulb, Part# 9004. (85519)
7/4/91		83,561	GB	R	F	MAIN		Changed engine oil- level was full. Drained 3139g. and added 3118g. Oil sample taken. (87635)
7/12/91	1	88,199	GB	R	F	WHTI		Driver reported the right rear tire went flat. Plugged nail hole in right rear tire. (92273)
7/17/91		91,145	GB	A	F	MAIN		Changed engine oil and fifter- level was 1/2 qt. low. Drained 3157g, and added 3290g, Oil sample taken and oil fifter saved. (95219)
7/26/91	1	97,083	GB	R	F	ENOA	1	Added 1qt. of engine oil. (789g.).
7/29/91	2	98,130	G <b>B</b>	R	F	MISC		Driver reported that the left headlight was inop. on low beam. Replaced left headlight butb. Part# 9004. (102204)

Customer nu	Customer number:		imber:	None	Ven#:	317		Engine: 1	.9L SEF	-1
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments		
Uale	Sinit	to date	w.	Sizius	ou.	<b>O</b> CC.	Cide	Comments		
DTE	SHF	TMTD	roc	STA	coc	TOC	<u></u>	DES		
7/15/91	2	84,254	GB	R	F	MISC		Driver reported that the right headlight was inop. Replaced right burnt out headlight builb. Part#9004 (88323)		
7/17/9 <b>1</b>		86,596	GB	R	F	MAIN		Changed engine oil- level was 1/2 qt. low. Drained 2930g, and added 3223g. Oil sample taken. (90665)		
7/17/91	2	87,022	GB	R	F	MISC		Driver reported that the left low beam headlight inop. Replaced left headlight, Part# 9004. (91091)		
7/22/91	1	90,225	GB	R	F	ENOA	1	Added 1qt. of engine oil. (792g.).		
7/24/91		93,431	GB	R	F	MAIN		Changed engine oil and filter- level was full.  Drained 3306g, and added 3287g, Oil sample taken and oil filter saved. (97500)		

Customer number:		None	Veh#:	318		Engine: 1	.9L SEF	:1
		Test miles			Client	Туре	Occ.	
Date	Shift	to date	Loc.	Status	Occ.	Occ.	Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	$\overline{\infty}$	DES
7/1/91	1	55,245	GB	A	F	WHTI		Oriver reported that both front hubcaps were missing, at Ford research yard. One was found in trunk, but one still missing. Reinstalled hubcap on left front. (65362)
7/8/91		59,834	GB	R	F	MAIN		Changed engine oil- level was 1/2 qt. low. Drained 2669g, and added 3182g. Oil sample taken. (69951)
7/16/91		67,143	GB	R	F	MAIN		Changed engine oil and filter- level was full.  Drained 3248g, and added 3267g, Oil sample taken and oil filter saved. (77260)
7/22/91	1	72,277	G <b>B</b>	R	F	MISC		Driver reported that the right headlight was inop. Replaced right headlight bulb, Part# 9004. (82394)
7/25/91		75,101	GB	R	. · F	MAIN		Changed engine oil- level was 1/2 qt. low. Drained 2653g. and added 3120g. Oil sample taken. (85218)
7/25/91	1	76,645	GB	R	F	MISC		Driver reported left headlight was inop. Replaced left headlight bulb. Part#9004. (86762)

Customer number:		None	None	None	Veh#:	315		Engine: 1	.9L SEF	1
		Test miles		•	Client	Туре	Occ.			
Date	Shift	to date	Loc.	Status	Occ.	Occ.	Order	Comments		
DTE	SHF	TMTD	LOC	STA	coc	TOC	$\overline{\infty}$	DES		
6/17/91		75,823	G₿	R	F	MAIN		Changed engine oil and filter- level was 1/2 qt. low. Drained 3042g, and added 3576g. Oil sample taken and oil filter saved. (79944)		
6/17/91	3	76,534	G <b>B</b>	R	F	MISC		Driver reported that the left headlight was inop.  Replaced left headlight bulb. Partif 9004. (80655)		
6/21/91	3	80,819	GB	R	F	MISC		Driver reported that right headlight inop, on low beam, Replaced right front headlight builb. Partif 9004. (84940)		
6/24/91		80,819	GB	Н	F	EMIS		Vehicle taken to Ford for emission test. Due at 85,000 miles. (84940)		

Customer number:		None	Veh#:	316		Engine: 1	.9L SEF	<b>i</b>
		Test miles			Client	Туре	Occ.	
Date	Shift	to date	Loc.	Status	Occ.	<b>0∝</b> .	Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	$\overline{\infty}$	DES
6/1/91		68,489	GB	R	F	MAIN		Changed engine oil- level was 1/4 qt. low. Drained 2496g, and added 3024g. Oil sample taken. (72563)
6/4/91		69,339	G <b>B</b>	R	F	MISC		Driver reported that left headlight was inop.  Replaced left headlight builb. Part# 9004. (73413)
6/14/91		75,930	GB	R	F	MAIN		Changed engine oil and filter-level was 1/4 qt. low. Drained 2914g, and added 3167g. Oil sample taken and oil filter saved. (80004)
6/14/91		76,056	GB	R	F	ENOA		Added 1qt. of Engine Oil, 789g. (80130).
6/18/91		78,329	GB	A	F	ENOA	•	Added 1qt. of Engine Oil, 782g. (82403).
6/20/91		80,866	GB	A	F	WHTI		Transfered rear tires from #317 to #316 and put spare on right rear. (84940)
6/20/91		80,866	G <b>B</b>	н	F	EMIS		Vehicle taken to Ford for emissions test and tires.  Due at 85,000 miles. (84940)

Customer nu	Customer number:		Veh#:	317		Engine: 1	I.9L SEF	:1
		Test miles			Client	Туре	Occ.	
Date	Shift	to date	Loc.	Status	Oœ.	Occ.	Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	$\overline{\infty}$	DES
6/8/91		70,796	GB	R	F	MAIN .		Changed engine oil- level was 1/4 qt. low. Drained 2822g, and added 3136 g. Oil sample taken. (74865)
6/19/91	2	75,414	GB	Ř	F	ENCS		Driver reported that SES light came on for two miles during shift. Codes stored were 67, 10, 41, 63. Informed Curt Tyson. (79483)
6/19/91	2	75,635	GB	R	F	WHTI		Oriver reported that tires are noisy and vehicle shakes when driving. Needs rear tires, to be installed by Ford. (79704)
6/24/91		78,375	GB	R	F	WHT		Rotated tires front to rear. (82444)
6/24/91		78,375	GB	н	F	MISC		Vehicle taken to Ford for repairs. (82444)
6/24/91		78,375	GB	R	F	MAIN		Changed engine oil and filter-level was 1 qt. low. Drained 2926g, and added 3500g. Oil sample taken and oil filter saved. (82444)

Customer number:		None	Veh#:	318		Engine: 1	.9L SEF	ı
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
DTE	SHF	TMTD	LOC	STA	COC	TOC	<u></u>	DES
6/3/91		43,453	GB	R	F	MISC		Oriver reported left low beam on headlight was inop. Replaced left headlight bulb. Part# 9004. (53570)
6/5/91		44,955	GB	R	F	MAIN		Changed engine oil- level was full. Drained 2729g. and added 2987g. Oil sample taken. (55072)
6/5/91		45,148	GB	Ř	F	MISC		Driver reported that right headlight was inop.  Replaced right burnt out headlight bulb. Part# 9004.  (55265)
6/13/91		52,861	GB	A	F	MAIN		Changed engine oil and filter-level was 1/4 qt. low. Drained 3011g. and added 3285g. Oil sample taken and oil filter saved. (62978)
6/17/91		55,000	GB	н	F	EMIS		Vehicle taken to Ford for emission testing. (65117)

Customer number:		None	Veh#:	315		Engine: 1	I.9L SEF	-1
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u></u>	DES
5/11/91		60,557	GB	R	F	MAIN		Changed engine oil and filter- level was 1/4 qt. low. Drained 3098g, and added 3341g. Oil sample taken and oil filter saved. (64678)
5/15/91		62,452	G <b>B</b>	R	F	MISC		Oriver reported that right low beam headlight was inop. Replaced right burnt out headlight bulb. Part# 9004. (66573)
5/28/91		68,454	GB	R	F	MAIN		Changed engine oil- level was 1/2 qt. low. Oil sample taken. (72575)

Customer nu	Customer number:		Veh#:	316		Engine: 1	.9L SEF	7
		Test miles			Cilent	Туре	Occ.	
Date	Shift	to date	Loc.	Status	Oœ.	Occ.	Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	$\overline{\infty}$	DES
5/2/91		53,359	GB	R	F	MAIN		Changed engine oil- level was 3/4 qt. iow. Drained 2465g, and added 3147g. Oil sample taken. (57433)
5/15/91		59,679	GB	R	F	MISC		Driver reported that right low beam headlight was inop. Replaced right burnt out headlight builb. Part# 9004. (63753)
5/17/91		61,184	GB	R	F	MAIN		Changed engine oil and filter-level was 1/4 qt. low. Drained 3002g, and added 3315g. Oil sample taken and oil filter saved. (65258)
5/23/91		63,971	GB	Н	F	TRAN		Driver reported that the clutch was inop. R&R trans and replace clutch Part# F1LZ27550A, pressure plate Part# F0LZ7563-A, release bearing assembly Part#F0JY7548-A. (68045)
5/30/91		67,060	GB	R	F	FRSU		Replaced both front struts. Left strut Part#-CT-20, RFE=F0C6-18K001-BE, Right strut Part#-CT-20, RFE=F0C6-18045-BE, (71134)
5/30/91		67.060	GB	A	F	FASU		Align front suspension, (71134)

Customer number:		None	Veh#:	317		Engine: 1	.9L SEF	<b>[</b> ]
		Test miles			Client	Туре	Occ.	
Date	Shift	to date	Loc.	Status	Occ.	Occ.	Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u>ooc</u>	DES
5/6/91		52,115	GB	R	F	MISC		Driver reported left high beam inop. Replaced left headlight bulb. Partif9004. (56184)
5/8/91		53,825	GB	Я	F	MISC		Driver reported right headlight inop. Replaced right headlight bulb. Part#9004. (57894)
5/9/91		53,825	GB	R	F	WISY		Driver reported that windshield cracked in left front area. Vehicle able to continue. (57894)
5/14/91		55,932	GB	A	F	MAIN		Changed engine oil- level was 1/2 qt. low. Drained 2411g. and added 3023g. Oil sample taken. (60001)
5/28/91		63,758	GB	R	F	MAIN		Changed engine oil and filter- level was 1/2 qt. low. Drained 3016g, and added 3578g. Oil sample taken and oil filter saved. (67827)
5/31/91		66,113	GB	R	F	FRSU		Replaced both front struts. Left strut Part#CT-20,RFE=F0C6-18K001-BE. Right strut Part#CT-20, RFE=F0C6-18045-BE. (70182)
5/31/91		66,113	GB	R	F	FRSU		Align front suspension. (70182)

Customer nu	Customer number:		Veh#:	318		Engine:	1.9L SEF	
		Test miles			Client	Туре	Occ.	
Date	Shift	to date	Loc.	Status	Occ.	Occ.	Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	00C	DES
5/11/91		30,047	GB	A	F	MAIN .		Changed engine oil- level was 1/4 qt. low. Drained 2662g, and added 3157g. Oil sample taken. (40164)
5/23/91		37,301	GB	R	F	MAIN		Changed engine oil and filter-level was 1/4 qt. low. Drained 3198g, and added 3521g. Oil sample taken and oil filter saved. (47418)
5/31/91		41,985	GB	R	F	FRSU		Replaced both front struts. Left strut Part#CT20, RFE= F0C6- 18K001-BE, Right strut Part#CT20,RFE=F0C6- 18045-BE. (52102)
5/31/91		41,985	GB	R	F	FRSU		Align front suspension. (52102)

Customer number:		None	Veh#:	315		Engine:	1.9L SEF	<b>-1</b>
Oate <sub>.</sub>	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u></u>	DES
4/3/91		50,820	GB	R ·	F	EMIS		Vehicle taken to Ford for emissions test. Due at 55,000 miles. (54941)
4/24/91		51,216	GB	R	F	ELSY		Driver reported that battery light stays on. Replaced alternator- 0 amp output. Partif900801-B. (55337)
4/27/91		53,352	G <b>8</b>	R	F	MAIN		Changed engine oil- level was 1/4/ qt. low. Drained 2666g, and added 3135g. Oil sample taken.

Customer number:		None	Veh#:	316	Engine: 1.9L SEFI					
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments		
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u></u>	DES		
4/1/91		49,080	GB	R	F	MISC		Windshield wiper on left side not wiping windshield Lub wiper arms- sticking. (53154)		
4/3/91		50,369	GB	R	F	EMIS		Vehicle taken to Ford for emissions test. Due at 55,000 miles. (54443)		

Customer number:		None	Veh#:	317		Engine: 1	.9L SEF	-1
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Туре Осс.	Occ. Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u></u>	DES
4/4/91		48,072	GB	Я	F	TRAN		Driver noticed transmission hard to get into gear and shifts hard. Replaced clutch disc, Part#FOCZ-7550-A, and replaced pressure plate,
								Part#FOCZ-7563-A. (52141)
4/10/91		50,875	G <b>B</b>	A	F	EMIS		Vehicle taken to Ford for emissions testing. Due at 55 000 miles. (54944)

Customer number:		None	Veh#:	318		Engine: 1	I.9L SEF	·I
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u></u>	DES
4/2/91		18,562	GB	R	F	WISY		Driver noticed crack in windshield. Vehicle able to continue on shift. (28679)
4/2/91		. 19,420	GB	R	F	ELSY		Right head light on low beam inop. Replaced right head light bulb. Part#9004. (29537)
4/25/91		22,257	GB	R	F	MAIN		Changed engine oil and filter- level was full.  Drained 3157g, and added 3512g. Oil sample taken and oil filter saved. (32374)

Customer number:		None	Veh#:	315		Engine: 1	.9L SEF	=1
Data	CL:4	Test miles	1	Status.	Client	Туре	Occ.	2
Date	Shift	to date	Loc.	Status	Occ.	Occ.	Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	00C	DES
3/7/91		36,144	GB	R	F	FRSU	2	Replaced right front strut, leaking & noisy. Part# 18124-F. (40265)
3/12/91		38,188	GB	R	F	MAIN	2	Changed engine oil- level was 1/4qt. low. Drained 2793g. and added 3224g. Oil sample taken. (42309)
3/13/91		39,190	GB	R	F	ELSY	1	Right head light inop., replaced bulb Part#9004. (43311)
3/19/91		42,456	GB	A	F	ELSY	1	Replaced left head light bulb. inop. Part#9004. (46577)
3/25/91		45,757	GB	<b>A</b>	F	MAIN	1	Changed engine oil & filter- level was full. Drained 3230g, & added 3554g. Saved oil filter & oil sample taken. (49878)

Customer number:		None	Veh#:	316		Engine: 1	.9L SEF	·1
		Test miles			Client	Туре	Occ.	
Date	Shift	to date	Loc.	Status	Occ.	Occ.	Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	00C	DES
3/4/91		30,347	GB	A	F	ELSY	1	Replaced both front head light bulbs, Part#9004, bulbs were burn't out. (34421)
3/5/91		30,754	GB	R	F	MAIN	1	Changed engine oil & filter- level was 1/2qt, low. Drained 3017g, and added 3476g. Oil sample taken $\epsilon$ oil filter saved. (34828)
3/16/91		38,564	GB	A	F	MAIN	1	Changed engine oil- level was full. Drained 3263g, and added 3253g. Oil sample taken. (42638)
3/19/91		39,778	GB	R	F	ELSY	1	Replaced right front head light bulb, inop. Part#9004. (43852)
3/27/91		45,913	GB	R	F	ELSY	1	Left head light inop. Replaced left head light bulb. Partif9004. (49987)
3/27/91		45,913	GB	A	F	MAIN	1	Changed engine oil & filter, level was 1/4qt. low.  Drained 3076g, and added 3335g. Oil sample taken & oil filter saved. (49987)

Customer number:		None	None	None	None	Veh#:	317		Engine: 1	.9L SEF	=1
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments			
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u></u>	DES			
3/1/91		33,377	GB	R	F	MAIN	1	Changed engine oil & filter- level was 1/2qt. low. Drained 3070g, added 3569g. Oil sample taken & oil filter saved. (37446)			
3/14/91		40,081	GB	R	F	ELSY	1	Replaced horn, inop. Part#13833-A. (44150)			
3/14/91		40,081	GB	R	F	ELSY	2	Replaced left head light bulb, inop. Part#9004. (44150)			
3/15/91		40,900	GB	R	F	MAIN	1	Changed engine oil-level was full. Drained 2807g, and added 3211g. Oil sample taken. (44969)			
3/19 <b>/91</b>		42,526	GB	R	F	FRSU	1	Thumping noise when going over bumps, Right front strut ordered. (46595)			
3/20/91		42,930	GB	R	F	FRSU	1	Replaced right front strut, leaking. Part#18124-F. (46999)			
3/27/91		46,214	GB	A	F	ELSY	1	Vehicle hard to start. Replaced starter Part#FOFZ11002. (50283)			
3/30/91		47,987	GB	R	F	MAIN	1	Changed engine oil & filter- level was full. Drained 3184g, and added 3332g. Oil sample taken & oil filter saved. (52056)			

Customer number:		None	Veh#:	318		Engine: 1	.9L SEF	-1
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Туре	Occ. Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	<u></u>	DES
3/8/91		5,877	GB	R	F	FRSU	1	Replaced left front strut, leaking. (Part#18124C). (15994)
3/11/91		6,310	GB	R	F	ELSY	2	Replaced right head light bulb, inop. (part#9004). (16427)
3/13/91		7,603	GB	Я	F	MAIN	1	Changed engine oil & filter- level was 1/2qt. low. Drained 2788g, and added 3479g. Oil filter saved & oil sample taken. (17720)
3/19/91		11,877	GB	R	F	INTE	1	Carpet is pulled loose at left door sill plate. Repaired loose carpet. (21994)
3/19/91		11,877	GB	R	F	BOTR	2	Reveal moulding on left side of windshield coming loose. Reglue windshield moulding, (21994)
3/23/91		14,859	GB	R	F	MAIN	2	Change engine oil- level was full, Drained 2684g, and added 3187g. Oil sample taken. (24976)
3/26/91		15,279	GB	R	F	TRAN	1	Driver noticed vehicle was hard to shift into gears.  Adjusted clutch rod. (25396)
3/31/91		18,562	GB	R	F	ESLY	1	Replaced left front head light bulb, burn't out.

Customer nu	mber:	None	ven#:	315		Engine: 1	I.9L SEF	· I
_		Test miles		_	Client	Туре	Occ.	
Date	Shift	to date	Loc.	Status	Occ.	Occ.	Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	00C	DES
2/12/91		23,405	G <b>B</b>	Я	F	MAIN	3	Changed engine oil-level was full. Drained 2889g, added 2830g. (27526)
2/12/91		23,632	GB	R	F	ELSY	1	Both front headlights inop. Replaced both headlights bulbs Part#9004(27753)
2/22/91		28,632	GB	R	F	FRSU	2	Rattle in front when hitting bumps. Right front strut ordered. (32753)
2/26/91		30,887	GB	R	F	MAIN	1	Changed engine oil & filter- level was 3/4 qt. low. Drained 2349c, added 3530c, (35008)

Customer number:		None	Veh#:	316	•	Engine: 1	.9L SEF	-1
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
DTE	SHF	TMTD	LOC	STA	coc	TOC	00c	DES
2/5/91		18,817	GB	R	F	ELSY	1	Left front headlight low beam inop., Replace left headlight bulb. Part#9004(22891)
2/8/91		18,834	GB	A	F	FRSU	1	Noise from right front wheel when hitting bumps.  Replaced right front strut. Part#18124F(22908)
2/12/91		19,846	GB	Я	F	ENOA	. 1	Added 1qt. of Engine Oil, 773g. (23920).
2/20/91		23,554	GB	R	F	MAIN	1	Changed engine oil- level was full. Drained 2964g, added 3149g, Saved oil sample. (27628)

Customer number:		None	Veh#:	317	Engine: 1.9L SEFI				
Date	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments	
DTE	SHF	TMTD	LOC	STA	coc	TOC	000	DES	
2/14/91		26,330	GB	R	F	ELSY	1	Left front headlight inop. Replaced left front headlight bulb. Part#9004. (30399)	
2/14/91		26,507	GB	R	F	MAIN	2	Changed engine oil-level was 3/4 qt. low. Drained 2365g, added 3018g. (30576)	
2/18/91		27,342	GB	R	F	ELSY	1	Horn does not work, Part ordered. (31411)	
2/21/91		28,857	G8	R	F	ELSY	1	Replaced right front headlight bulb. Inop. Part#9004, (32926)	

Customer number:		None	ven#.	316		Engine: i	.9L	1	
	Date	Shift	Test miles to date	b Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments
	DTE	SHF	TMTD	LOC	STA	COC	TOC	<u>~</u>	DES
		ЭПГ		_	- '				
	2/18/91		546	GB	н	F	BAEN	2	Engine replaced by Ford due to excessive oil consumption at 10,117 miles. (10663)
	2/18/91		546	G8	R	F	MISC	. 3	Vehicle returned to Sycron 2/18/91,10663 miles. (10663)
	2/20/91		1,958	GB	R	F	FRSU	1	Noise in left front when hitting bumps. Strut ordered.
	2/23/91		4.616	GB	R	F	ENOA	1	Added 1qt. of Engine Oil, 766g (14733)
	2/25/91		4.942	GB	н	F	EMIS	2	Taken to Ford for emissions testing. (15059)

Customer number:		None	Veh#:	315	Engine: 1:9L SEFI				
Oate	Shift	Test miles to date	Loc.	Status	Client Occ.	Type Occ.	Occ. Order	Comments	
1/7/91 1/28/91		15,833 16,216	GB GB	H	F	EMIS MAIN		Vehicle Taken To Ford For Emission Test. (19954) Changed Engine Oil And Filter-Level Was Full. Drained 3348g, Added 3527g. (20337)	